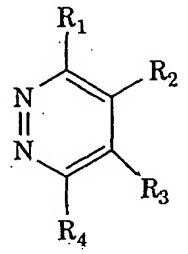
WHAT IS CLAIMED IS:

1. A compound of the formula (I) or a pharmaceutically acceptable salt thereof:



(I)

wherein

R_1 is halogen, aromatic ether, alkyl sulfonate, aryl sulfonate, alkyl phosphonate, aryl phosphonate, alkyl phosphate or aryl phosphate;

R_2 is $COOR_5$, $C(=0)NH(CHR_5)_m\text{-}COOR_5$, $NH(CHR_5)_mCON(R_5)R_6$, $C(=0)N(R_5)R_6$ or $NH(CHR_5)_m$ OH;

R_3 is H or alkyl;

R_4 is H, substituted or unsubstituted aryl, heteroaryl or alkyl;

R_5 and R_6 are independently H, lower alkyl, aryl, hydroxy alkyl, amio alkyl, heteroaryl, lower alkylene-aryl, lower alkylene-heteroaryl or lower cycoalkyl; and m is 0-6.

2. The compound of claim 1 wherein said aryl is phenyl, naphthyl or substituted phenyl.

3. The compound of claim 2 wherein said phenyl is substituted by halo, lower alkyl, nitro, amino, acylamino, hydroxyl, lower alkoxy, trifluoromethyl, alkyl sulfonyl, morpholinoethoxy or morpholino-sulfonyl.

4. The compound of claim 1 wherein said heteroaryl is pyridyl, thienyl, furyl, thiozolyl, imidazolyl, pyrazolyl, triazinyl, quinolyl or isoquinolyl.

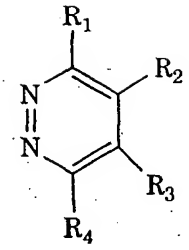
5. The compound of claim 1 selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboethoxy-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(3-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-bromophenyl))pyridazine and 3-Chloro-4-carboxamido-6-(4-trifluoromethylphenyl)pyridazine.

6. The compound of claim 1 selected from the group consisting of: 3-Chloro-4-carboxamido-6-(3,5-dichlorophenylpyridazine, 3-Chloro-4-carboxamido-6-(2-naphthyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-nitrophenyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-cyanophenyl)-pyridazine and 3-Chloro-4-carboxamido-6-(2-pyrazyl)pyridazine

7. The compound of claim 1 selected from the group consisting of: 3-Chloro-4-carboxamido-5-methyl-6-(4-chlorophenyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzylaminocarbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-[(C-ethoxy)glycyl]carbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzylaminocarbonyl)-6-[4-(3-chloro)pyridyl]-pyridazine and 3-Chloro-4-carboxamido-6-[4-(p-toluenesulfonamido)phenyl]-pyridazine.

8. The compound of claim 1 selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-quinolyl)pyridazine, 3-Chloro-4-carboxamido-6-(phenyll)pyridazine, 3-Chloro-4-carboxamido-6-(4-methoxyphenyl)pyridazine, 3-Chloro-4-carboxamido-6-[3.5-difluoro-4(methylsulfonyl)phenyl]pyridazine, 3-Chloro-4-carboxamido-6-[3-fluoro-4(methylsulfonyl)-5-(methoxy)-phenyl]-pyridazine, 3-Chloro-4[(phenylalanylcarbamido)-carbonyl]-6-(4-chlorophenyl)pyridazine and 3-Chloro-4-carboxamido-6-(3-chloro-4-fluorophenyl)pyridazine.

9. A pharmaceutical composition for inhibiting interleukin-1β protease comprising the formula (I) or a pharmaceutically acceptable salt thereof



(I)

wherein

R_1 is halogen, aromatic ether, alkyl sulfonate, aryl sulfonate, alkyl phosphonate, aryl phosphonate, alkyl phosphate or aryl phosphate;
R_2 is $COOR_5$, $C(=0)NH(CHR_5)_m$-$COOR_5$, $NH(CHR_5)_mCON(R_5)R_6$, $C(=0)N(R_5)R_6$ or $NH(CHR_5)_m$ OH;
R_3 is H or alkyl;
R_4 is H, substituted or unsubstituted aryl, heteroaryl or alkyl;
R_5 and R_6 are independently H, lower alkyl, aryl, hydroxy alkyl, amio alkyl, heteroaryl, lower alkylene-aryl, lower alkylene-heteroaryl or lower cycoalkyl; and m is 0-6 in a pharmaceutically acceptable carrier.

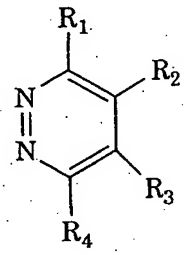
10. The pharmaceutical composition of claim 9 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboethoxy-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(3-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-bromophenyl))pyridazine and 3-Chloro-4-carboxamido-6-(4-trifluoromethylphenyl)pyridazine.

11. The pharmaceutical composition of claim 9 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(3,5-dichlorophenylpyridazine, 3-Chloro-4-carboxamido-6-(2-naphthyl)-pyridazine, 3-Chloro-4-carboxamido-6-(4-nitrophenyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-cyanophenyl)-pyridazine and 3-Chloro-4-carboxamido-6-(2-pyrazyl)pyridazine

12. The pharmaceutical composition of claim 9 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-5-methyl-6-(4-chlorophenyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzyl-aminocarbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-[(C-ethoxy)glycyl]-carbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzyl-aminocarbonyl)-6-[4-(3-chloro)pyridyl]-pyridazine and 3-Chloro-4-carboxamido-6-[4-(p-toluenesulfonamido)phenyl]- pyridazine.

13. The pharmaceutical composition of claim 9 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-quinolyl)pyridazine, 3-Chloro-4-carboxamido-6-(phenyll)pyridazine, 3-Chloro-4-carboxamido-6-(4-methoxyphenyl)pyridazine, 3-Chloro-4-carboxamido-6-[3.5-difluoro-4(methylsulfonyl)phenyl]pyridazine, 3-Chloro-4-carboxamido-6-[3-fluoro-4(methylsulfonyl)-5-(methoxy)-phenyl]-pyridazine, 3-Chloro-4[(phenylalanylcarbamido)-carbonyl]-6-(4-chlorophenyl)pyridazine and 3-Chloro-4-carboxamido-6-(3-chloro-4-fluorophenyl)pyridazine.

14. A method of inhibiting interleukin-1β protease activity in a mammal in need of such treatment comprising administering to said mammal an effective inhibitory amount of a pharmaceutical composition comprising a compound of the formula (I) or a pharmaceutically acceptable salt thereof:



(I)

wherein

R1 is halogen, aromatic ether, alkyl sulfonate, aryl sulfonate, alkyl phosphonate, aryl phosphonate, alkyl phosphate or aryl phosphate;

R_2 is $COOR_5$, $C(=0)NH(CHR_5)_m$-$COOR_5$, $NH(CHR_5)_mCON(R_5)R_6$, $C(=0)N(R_5)R_6$ or $NH(CHR_5)_m$ OH;
R_3 is H or alkyl;
R_4 is H, substituted or unsubstituted aryl, heteroaryl or alkyl;
R_5 and R_6 are independently H, lower alkyl, aryl, hydroxy alkyl, amio alkyl, heteroaryl, lower alkylene-aryl, lower alkylene-heteroaryl or lower cycoalkyl; and m is 0-6 in a pharmaceutically acceptable carrier.

15. The method of claim 14 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboethoxy-6-(4-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(3-pyridyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-bromophenyl))pyridazine and 3-Chloro-4-carboxamido-6-(4-trifluoromethylphenyl)pyridazine.

16. The method of claim 14 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(3,5-dichlorophenylpyridazine, 3-Chloro-4-carboxamido-6-(2-naphthyl)-pyridazine, 3-Chloro-4-carboxamido-6-(4-nitrophenyl)pyridazine, 3-Chloro-4-carboxamido-6-(4-cyanophenyl)-pyridazine and 3-Chloro-4-carboxamido-6-(2-pyrazyl)pyridazine

17. The method of claim 14 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-5-methyl-6-(4-chlorophenyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzyl-aminocarbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-[(C-ethoxy)glycyl]-carbonyl)-6-(4-pyridyl)pyridazine, 3-Chloro-4-(2,4-dichlorobenzyl-aminocarbonyl)-6-[4-(3-chloro)pyridyl]-pyridazine and 3-Chloro-4-carboxamido-6-[4-(p-toluenesulfonamido)phenyl]- pyridazine.

18. The method of claim 14 wherein said compound is selected from the group consisting of: 3-Chloro-4-carboxamido-6-(4-quinolyl)pyridazine, 3-Chloro-4-carboxamido-6-(phenyll)pyridazine,

3-Chloro-4-carboxamido-6-(4-methoxyphenyl)pyridazine, 3-Chloro-4-carboxamido-6-[3.5-difluoro-4(methylsulfonyl)phenyl]pyridazine, 3-Chloro-4-carboxamido-6-[3-fluoro-4(methylsulfonyl)-5-(methoxy)-phenyl]-pyridazine, 3-Chloro-4[(phenylalanylcarbamido)-carbonyl]-6-(4-chlorophenyl)pyridazine and 3-Chloro-4-carboxamido-6-(3-chloro-4-fluorophenyl)pyridazine.